203.5 - Differential Scanning Calorimetry and Differential Thermal Analysis

These SRMs are for calibration and validation of differential scanning calorimeters, differential thermal analyzers, and similar instruments.

Enthalpy and Temperature of Fusion

Technical Contact: donald archer@nist gov

Enthalpy and Heat Capacity

Thermal Analysis Purity Set

SRM 1514 is for evaluating methods of determining purity by differential scanning calorimetry. It consists of pure phenacetin and phenacetin doped with p-aminobenzoic acid

PLEASE NOTE: The tables are presented to facilitate comparisons among a family of materials to help customers select the best SRM for their needs. For specific values and uncertainties, the certificate is the only official source.

SRM	Description	Unit Size	Melting Temperature (K)	Enthalpy of Fusion (J/g)	
2220	DSC Enthalpy Tin	each	505.08	56.57	
2225	Mercury (Differential Scanning Calorimeters)	2.5 g	234.30	11.469	
2232	Indium DSC Calibration Standard - Temperature and Enthalpy of Fusion	1 g	156.5985°C	28.51	
2234	Gallium for Thermal Analysis	approximately 2 g	302.9146	80.097	
2235	Bismuth for Thermal Analysis	1.5 g	544.556	53.146	

^{*} Certified for four levels of p-ABA (in mol %).